



BCTS

BC Timber Sales

Kamloops

SITE PLAN

KAMLOOPS

BC TIMBER SALES

Report Date 2021/11/10

TENURE IDENTIFICATION

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
TA0058	-	RF9G4	BE9G4	92P.046-507		South Sheridan Lake	51 28 50 / 120 55 54

AREA UNDER THE PLAN

GROSS AREA (TAUP)	PAS	NP	WTRA / WTP	RESERVES	OTHER	NAR
44.8	1.7	0.0	5.4	0.0	0.0	37.7

ADDITIONAL COMMENTS

DEFINITIONS (ADD DEFINITIONS AS REQUIRED)
<p>This Site Plan covers block RF9G4 and road MH R22062.01, and is consistent with the BCTS Kamloops Business Area, 100 Mile House TSA Forest Stewardship Plan #223 approved March 31, 2007, and extensions granted up to the term of the new FSP. This Site Plan is also consistent with the May 2019 Cariboo Region FSP Extension Conditions. Furthermore, it is a declared block that was approved under the most recent submission of the BCTS 100 Mile House TSA Forest Stewardship Plan #816 –dated October 1, 2019 and Approved February 26, 2020.</p> <p>This Site Plan is prepared for this block and its associated road in accordance with FRPA Section 10 (1), (2) & (3).</p>

SOIL DISTURBANCE

SU	Max. Allowable Soil Disturbance (%)	Max. Amount TAS May Exceed MASD Prior To Rehab (%)	Max. Allowable Soil Disturbance For Roadside Work Areas (%)	Maximum Permanent Access Structures (%)
1	10.0	5.0	25.0	3.8
SU	CRITICAL SITE CONDITIONS THAT AFFECT THE TIMING OF OPERATIONS. AND HOW THEY AFFECT THE TIMING			
1	<p>The SU has moderately well drained Silty Loam soils. Avoid concentrated forwarding/skidding routes in wet soil conditions. Due to the hydrophobicity of the burned soils, the top layer can become greasy and slick during break-up conditions. Use caution with machinery at this time and while walking through the area. Road surfaces will need to be maintained accordingly to minimize rutting and the potential of becoming stuck.</p>			

RESULTS AND STRATEGIES

RESULT OR STRATEGY		HOW THE STRATEGY OR RESULT APPLIES TO THE SITE or RATIONALE (IF NOT APPLIED)
Cultural Heritage		<p>Obj. 1.15 - This development has been referred to all potentially affected First Nations , as was determined through a search of the Consultative Area Database (CAD). This block has been field reviewed and amended as per First Nations recommendations. Reports have not yet been received at this time.</p> <p>If a previously unidentified affected cultural heritage resource is encountered during harvesting , road construction, or mechanical site preparation, operations are required to cease to the extent necessary to protect the affected cultural heritage resource until a cultural heritage resource evaluation can be carried out.</p>
Invasive Plants		<p>Obj 1.16.2.1- A review of the known location of invasive plants on the Invasive Alien Plant Program (IAPP) database indicates that there are no occurrences of invasive plants within the immediate vicinity of the development.</p> <p>Preventative measures for controlling the introduction of invasive species will be implemented throughout the development, as below:</p> <p>1) Within one year of harvesting completion, contiguous areas of disturbed soil >/=0.25 ha, including areas occupied by ditch-lines, cut or fill slopes, and deactivated roads which are not reforested (except for active running surface) are revegetated with:</p> <p>a) Seed or forage mixture that meets or exceeds Canada Common #1 Forage Mixture as defined by the Canada Seeds Act & Regulation; or</p> <p>b) Native forbs or shrubs.</p> <p>2) Report new invasive plant infestation sites to the Ministry of Forests, Lands, Natural Resource Operations and Rural Development within one year of discovery.</p>

Landscape Level Biodiversity		<p>This block lies within FDU #10 Interlakes (E Interlakes SRDZ).</p> <p>Obj 1.11.1.1 - This block has a NAR of 38.6 ha. This entire area has been severely impacted by the Elephant Hill wildfire in 2017 and this block is planned to salvage fire killed timber.</p> <p>Obj 1.11.1.2- This opening is primarily within the Green Lake LU, NDT 3a_SBSdw2_na; the northeast portion of the block is within the Bridge Lake LU. A September 2019 seral stage analysis (Forsite) shows a surplus of 4,693 ha for Mature + Old, and a 555 ha deficit of Old. within the Green Lake LU, and a surplus in both the M+O and Old seral units in the Brdige Lake LU (2,865ha and 249ha, respectively). This block consists primarily of age classes 5 and 6, with a small portion in age class 8; however, the majority of the overstory is dead from wildfire in 2017. Harvesting this block will not cause the seral units to fall below targets.</p> <p>As per the patch size analysis (Forsite 2019), there is harvest opportunity for small and medium patches within NDT 3a of the Green Lake LU, and for all patch sizes in the NDT3b of the Bridge Lake LU. This block has been impacted by the 2017 Elephant Hill fire. Over 50% of the overstory basal area is dead, and this block is proposed to salvage fire-killed timber. Harvesting this block is also consistent with the Spatial/Temporal Distribution Condition (2)(c) of the FSP Conditional Extensions.</p> <p>This opening is not within the vicinity of any OGMA's.</p> <p>Obj 1.11.1.3 - addressed by obj 1.11.1.2. Obj 1.11.1.4 - addressed by objs 1.13.1 & 1.13.6.1 (Wildlife/Endangered Species). Obj 1.11.1.5 - addressed by objs 1.10.1.1 (Riparian Management), 1.11.1.2 (Landscape Level Biodiversity), 1.11.2.1 (Stand Level Biodiversity), 1.12.2.4 (Tourism), 1.13.3.1, 1.13.3.2 (Mule Deer), 1.14.1, and 1.14.4 (Visual Objectives). This block is consistent with spatial distribution design principles. Obj 1.11.1.7 - Not applicable as this opening is not within the grassland benchmark area. Obj 1.11.1.8 - addressed by obj 1.10.1.1 (Riparian Management).</p>
Other Resources		<p>Obj 1.18.1- This block is proposed for conventional harvesting methods. The timber target for 'Conventional' harvest within the Bonaparte Sub-unit is 77%. There are currently no reports indicating the status of the timber targets. The Results and Strategies for Obj. 1.10.1, 1.11.2, 1.13, 1.14, and 1.17 have been applied to help meet this target.</p>
Range		<p>Obj 1.16.1.1 - Harvesting this block will not remove or render ineffective any natural range barriers .</p> <p>Obj 1.16.3.1 - This development overlaps active range tenure RAN076338 - 7 P Ranch Inc. BCTS has referred this development to the rancher; no comments have been received.</p> <p>Obj 1.16.3.2 - No fences were noted within the harvest area during layout operations. However, if a fence has been constructed by the time harvesting activities commence, log up to any fences present (don't leave standing dead trees along fence), maintain a 6 m RoW around fence free of debris, no site prep or planting of RoW.</p> <p>Obj 1.16.3.3 - It is unknown if the current authorized level of AUMs of 15,900 in the Bonaparte FDU is being maintained.</p>
Recreation		<p>Obj 1.12.1.1 - This development overlaps designated buffered trails . The total overlap of both buffered trail management areas is <0.5 ha, with the overstory consisting of fire-killed timber. Removal of the dead overstory is recommended for the safety of the trail users. The trail should be cleared of debris after logging. The Green Lake and Interlakes Snowmobile Recreation Trails exist within the area . The South Green Lake Residences Association has been notified regarding the trail usage for hauling and no concerns were expressed. The snowmobile club has not yet been contacted; however, they must be notified if operations are to occur during the winter season.</p> <p>Obj 1.12.1.2 - Addressed by obj 1.12.1.1, obj. 1.12.2.8, obj 1.13.3.1 (Ungulate Winter Range), and obj 1.17.1 (Wildcraft & Access Management).</p> <p>Obj 1.12.2.1 - No known issues with regards to timing of harvest from recreation users.</p> <p>Obj 1.12.2.12 - Block is not adjacent to any key lakes, nor does it overlap any Lakeshore</p>
Riparian Management		<p>Management Zones (RMZs) Management Zones (RMZs) listed below are the classified riparian features associated with this development, and the management strategies prescribed for each. Refer to the Riparain Strategies under the Support Document of this Site Plan for non-classified riparian features.</p> <p>RF9G4-1-L3 - Boundary was established to exclude this feature and its RMZ from the harvest area, with the harvest boundary being located >/=30m from the lake edge. Retain any live understory regen and brush, if encountered, to the extent practicable within 100m of the lake edge.</p> <p>Obj 1.10.1.2 - This opening does not overlap a lakeshore management zone.</p> <p>Obj 1.10.1.6 - Addressed by obj 1.10.1.1, 1.10.1.3, obj 1.11.1.2 (Stand Level Biodiversity), obj 1.13.1, 1.13.5.1, 1.13.6.1, and 1.13.8.1 (Fish and Wildlife).</p> <p>Obj 1.10.1.9, 1.10.1.10, 1.10.1.11, 1.10.1.12 - Addressed by obj 1.10.1.1. Obj 1.10.1.14 - Addressed by obj 1.9.2.1 (General Water Resources) and obj 1.10.1.1.</p>
Soil Management		<p>Obj 1.8 - Soils within the block are primarily non-sensitive (SiL); therefore, the maximum soil disturbance limit is set to 10% of the NAR.</p> <p>TAS is currently calculated at 0.7%.</p> <p>PAS is calculated at 3.8% of the gross area.</p>

Stand Level Biodiversity		<p>Obj 1.11.2.1 - There are 8 wildlife tree retention areas (WTRA) associated with this block, accounting for 11.7% of the gross area. This opening is consistent with the minimum wildlife tree retention target of 8% for the SBSdw2_na in both the Green Lake and Bridge Lake LUs.</p> <p>The 100 Mile House Forest District Retention Strategy's Best Management Practices have been considered in the development of the opening and were applied where opportunities were available at the stand level.</p>
Visual Objectives		<p>Obj 1.14.1- There are no scenic areas with visual quality objectives associated with this opening.</p> <p>Obj 1.14.13 - The opening is not within the viewshed of any key lakes or known tourism operation; however, the block has been designed, to the extent practicable, to minimize visual impact by following natural features, terrain and timber types. The even terrain and lengthy viewing distance minimizes impact.</p> <p>Obj 1.14.14 - Addressed by 1.14.1 and 1.14.13.</p> <p>Obj 1.14.16 - This opening is not within a high elevation viewscape.</p> <p>Obj 1.14.17 - This opening is not within or adjacent to a scenic corridor.</p>
Watersheds/Hydro Assessments		<p>Obj 1.9.1.1 - This block is not within a community watershed. There are no licensed points of diversion located within the vicinity or downstream of this block.</p> <p>Obj 1.9.2.1 - This block is partially located within the Rayfield River sub-basin of the Bonaparte River super watershed, which is a key watershed under the CCLUP. A watershed assessment was carried out in the Bonaparte River watershed in 2019. Results of the assessment indicate that the Rayfield River sub-basin has a low likelihood of both peak flow increase, and of rainfall generated flash flooding, and it has a low risk of sedimentation. These ratings are not expected to change with salvage harvesting. Post-harvest risk of surface erosion was noted to be low to moderate. Clearing the dead overstory and establishing a new plantation will help in achieving hydrological recovery as soon as possible.</p> <p>This block is not within a Fisheries Sensitive Watershed.</p>
Wildcraft and Access Management		<p>Obj 1.17.1- There are currently no assessments available to confirm that the target of 80% for the Bonaparte FDU for maintaining roaded access for wildcraft activities is being met.</p>

Wildlife/Endangered Species		<p>Obj 1.13.1 - addressed by obj 1.10.1.1, 1.10.1.2, 1.10.1.3, 1.10.1.6, 1.10.1.9, 1.10.1.10, 1.10.1. 11, 1.10.1.12, 1.10.1.14 (Riparian Management), obj 1. 11.1.1, 1.11.1.2, 1.11.1.3, 1.11.1.4, 1.11.1.7, 1.11.1.8 (Landscape Level Biodiversity), obj 1. 11.2.1 (Stand Level Biodiversity), obj 1.13.3.1, 1.13.3.2 1.13.4.1, 1.13.4.2, 1.13.4.3 (Ungulate Winter Range), obj 1.13.5.1 (Furbearers), obj 1.13.6.1 (SAR), and obj 1.13.8.1 (Grizzly Bear).</p> <p>Obj 1.13.1.2 - addressed by obj. 1.10.1.1 (Riparian Management).</p> <p>Obj 1.13.1.8 - There are no critical fish habitat areas located within or adjacent to this opening.</p> <p>Obj 1.13.3.1, 1.13.3.2 - This opening is not within any designated Mule Deer Winter Range.</p> <p>Obj 1.13.4.1, 1.13.4.2, 1.13.4.3 - There are no high value moose wetlands (HVMW) within the vicinity of the development. There is a W1 wetland south of the block. The development is outside the MMU, and no access management is required.</p> <p>Obj 1.13.5.1 - addressed by obj 1.10.1.1 (Riparian Management), obj 1. 11.1.2 (Landscape Level Biodiversity).</p> <p>Obj 1.13.6.1 - addressed by obj. 1.13.1 (see above).</p> <p>This development is mapped as overlapping 2 BEC units: SBSdw2 and SBPSmk. Field walkthroughs have confirmed this block to be entirely representative of SBSdw2; it has been managed as such. A search of the BC Species and Ecosystems Explorer indicated 30 wildlife species at risk, 1 plant species at risk, and 3 ecosystems at risk that could potentially exist within the development area. None of these features were noted during development, and habitat requirements were considered during harvest boundary layout and WTRA placement. Refer to the documents "TA0058_SBS_SAR" and "TA0058_SBSdw2_Eco at Risk" on file for further information.</p> <p>This block is located within an identified American Badger area (CDC Occurrence ID 11263; Shape ID 83206). There are no known burrows within the development area, and no signs of any badgers were noted during development.</p> <p>There were no signs of any of the other species listed above noted during field development; however, their habitat requirements were considered during harvest boundary layout and WTRA placement.</p> <p>Refer to the Wildlife / Endangered Species Comments under Supporting Information for Migratory Bird Management.</p> <p>Obj 1.13.8.1 - addressed by obj. 1.10.1.1, 1. 11.1.2 and 1.11.1.4. Roads will be deactivated or rehabilitated once harvesting and primary silviculture acitvities are completed.</p> <p>Obj 1.13.5.1 - This development is within the dry sub-boreal fisher habitat zone: SBSdw1. There are no established WHAs within the vicinity. This block is within predominantly withinType 2 stand conditions for all listed fisher habitat types, and below the landscape condition targets. This block has been severely impacted by wildfire, with the majority of the timber having been killed. There was very little to no listed fisher habitat noted within the block. Additional CWD is prescribed as follows: 1 single piece of CWD >/=35 cm in diameter and >/=7m in length per hectare, elevated 25-50cm above ground, and 10 debris piles within the block being >/=3m wide by >/=5m long and piled >/=2m high, with >30% of the pieces being >20cm in diameter and >3m long, and piled in a jumbled manner. Debris piles should be a minimum of 20m away from standing timber, and are to be located between WTRAs and the block edge to maintain connectivity between standing timber, WTRAs, and any riparian areas.</p> <p>If encountered, any live, large diameter deciduous are to be retained for potential denning and cavity resting habitat.</p>
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STOCKING REQUIREMENTS

SU	NAR	STANDARDS ID #	OTHER PERFORMANCE STANDARDS
1	37.7	1060550	
COMMENTS	<p>MITD reduced to 1.8m to target micro-site selection as well as obstacles due to high cattle usage in the area.</p> <p>This block is located within a BEC transition zone between the SBSdw2 and SBPSmk biogeo zones. Field walkthroughs have indicated that the block is most representative of the SBS biogeo zone, and it has therefore been classified entirely as such.</p> <p>There are no stocking standards listed for SBSdw2 in the applicable FSP; therefore, the stocking standards for SBSdw2 in the new DMH BCTS FSP (#816) have been used.</p>		

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2021 11 10	YES

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
SARAH REMPEL	
DATE SIGNED	
2021/11/10	
I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to standards acceptable of a Registered Professional Forester.	

Map attached forms an integral part of the site plan.

SUPPORT DOCUMENT

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NIIMRFR	FDU	LOCATION	LATITUDE / LONGITUDE
TA0058	-	RF9G4	BE9G4	92P.046-507		South Sheridan Lake	51 28 50 / 120 55 54

ASSESSMENTS

VISUAL IMPACT ASSESSMENT INFORMATION
This development does not overlap any scenic areas with established VQOs. Refer to the Results and Strategies section.
PEST INCIDENCE SURVEY INFORMATION
Pest Specific Comments
None noted during field layout, primarily due to the severity of the burn.
Forest Health Comments
The majority of the timber within the block has been destroyed due to severe wildfire activity in 2017. This block is proposed to salvage the fire impacted timber.
ARCHAEOLOGICAL IMPACT ASSESSMENT INFORMATION
Refer to the Results and Strategies section.
TERRAIN STABILITY FIELD AND GULLY ASSESSMENTS INFORMATION
Terrain Stability Comments
No slope instability indicators were noted within or adjacent to the opening. A TSFA is not required.
Gully Comments
Not Applicable
VEGETATION
No significant competition during regeneration establishment is anticipated.

RIPARIAN ASSESSMENTS					
Management Strategies					
Maintain natural drainage patterns. MSZ = Machine Sensitive Zone RMZ = Riparian Management Zone See Results and Strategies section - Riparian Management.					
Riparian I.D. and Class	RMA	SU	WIDTH (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
All NCW UC	MSZ	1	5.0		All non-classified wetland and non-classified lake features have been excluded from the harvest area and occur a minimum 5m from the boundary edge. No additional management strategies are required.
RF9G4-1-L 3 L3	RMZ		30.0		The harvest boundary occurs a minimum 50m from the edge of the L3 lake feature, therefore no RMZ overlap occurs. Retain any understory regen and brush to the extent practicable within 100m of the lake edge.

SOIL ASSESSMENT							
HAZARD RATINGS				SOIL CHARACTERISTICS			
SU	Soil Comp	Soil Erosion	Soil Disp	Depth To Unfavourable Subsoil		Type of Unfavourable Subsoil	Sediment Delivery Risk (Community Watersheds)
				Min(cm)	Max(cm)		
1	H	M	M			NNTD	

COMMENTS
Soils within the block are primarily non-sensitive (SiL); therefore, the maximum soil disturbance limit is set to 10% of the NAR. TAS is currently calculated at 0.7% of the NAR. PAS is calculated at 3.8% of the gross area. Recommend using a random skidding pattern and avoid skidding across depressional areas when wet. This block is consistent with sections 35 and 36 of the FPPR.

RESERVE / RETENTION INFORMATION

WTRA / WTP (INSIDE OR ATTRIBUTED TO THE BLOCK)		
I.D.#	Area	Description
WTRA	5.4	The WTRAs were established to protect areas of little to no burn (green timber), areaswith wetter/more sensitive soils, and to provide a buffer adjacent to the L3 lake. Fdi(At) 633-16; Fdi (SxAt) 534-18; FdiSx(At) 533-18.

GROUP WTRA / WTP AND SITE DEG. CALCULATION (to be retained on the first block of the Permit only)						
Block	Gross Cutblock Area	WTRA / WTP	%	BEC	Perm Access	%
RF919	12.5	2.6	20.7	SBS/dw/2	0.3	2.2
RF9G4	44.8	5.4	11.9	SBS/dw/2	1.7	3.9
Total # of Blocks: 2	57.3	7.9	13.9		2.0	3.5

SUPPORTING INFORMATION

HLP/FSP CONSIDERATIONS
Wildlife/Endangered Species Comments
<p>The design of this harvest area considered Migratory Bird Habitat polygons and the Beneficial Management Practices as outlined in the BCTS Migratory Bird Strategy (2016).</p> <p>The proposed harvest area is mapped within Rank 3 (Moderate risk) and Rank 4 (Moderately High risk) polygons (BCTS Migratory Bird Strategy). Although the majority of the stand has been destroyed due to the 2017 wildfires, there are several riparian features within or within close proximity of this development, including small lakes and wetlands; there is also a minor aspen component within the stand. The BMPs applied to this block to minimize/prevent incidental take include: Planned Retention (PL2), Riparian Protection (LO2), Unmarked Retention (LO3), and Wildlife Tree and Stub Retention (LO4).</p> <p>If a previously unidentified migratory bird nest is encountered during harvesting, road construction, or a silviculture activity associated with this Site Plan, operations must cease to the extent necessary to protect the affected migratory bird nest until alternative BMPs can be implemented to minimize or prevent the risk of incidental take.</p> <p>Refer to the Results and Strategies section.</p>
Range Comments
<p>Active Range Tenure: RAN076338 - Bert Sauer Trucking Ltd.</p> <p>No fences were noted within the development during layout operations. Refer to the Results and Strategies section.</p>
Fisheries Comments
<p>There are lakes within the vicinity of the development; forestry activities are not expected to have any adverse impact of the fisheries resource.</p>
Watersheds/Hydro Assessments Comments
<p>This block is not located within any community watersheds.</p> <p>Refer to the Results and Strategies section.</p>
Sensitive Areas Comments
<p>There are 6 known red or blue listed sensitive areas within the SBSdw2 biogeo zone in the 100 Mile Forest District, none of which were identified during layout of this development.</p>
Recreation Comments
<p>Snowmobile trails exist within the area. Refer to the Results and Strategies section. Also see Harvesting Constraints in the Harvest Plan section.</p>
Cultural Heritage Comments
<p>No additional management applies to the development above the Results and Strategies contained in the Site Plan for this block.</p>
Biodiversity Emphasis/L.U. Comments
<p>Landscape Unit: Primarily within Green Lake; Biodiversity Emphasis Option: Low. Northeast portion within Bridge Lake; BEO: Intermediate; SBSdw2_na WTRA retention targets for both LUs is 8%.</p> <p>There are no OGMA polygons within the vicinity of this development .</p> <p>This block does not occur within any designated Ungulate Winter Range (UWR).</p> <p>Refer to the Results and Strategies section.</p>
Other Resources Comments
<p>Trapper: This block overlaps an active trapline (TR0501T014). BC Timber Sales has referred this block to the trapline tenure holder . The trapper did not provide any specific comments regarding the block or roads. No further comments have been received at this time and no special management has been prescribed.</p> <p>Guide Outfitter: This block overlaps an active guiding area (Guiding Certificate Number 500345), owned by Mussfeld, Eberhard.</p>
ADDITIONAL COMMENTS:
Surveys
Estimated windthrow potential, as assessed using the Ministry of Forests Windthrow Field Card Assessment Page A, is Moderate.

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2021 11 10	YES

HARVEST PLAN

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NIIMRFR	FDU	LOCATION	LATITUDE / LONGITUDE
TA0058	-	RF9G4	BE9G4	92P.046-507		South Sheridan Lake	51 28 50 / 120 55 54

SILVICULTURE SYSTEMS

SU	SYSTEM	VARIANT	PHASE	RESERVE	Min BA (m2/ha)	Min Residual Density (sph)
1	CCRES		SALVF	D		
Current Stand Structure/Site Conditions			The current stand consists of 93% Fdi, 6%Sx, 1% PI in the overstory, all heavily impacted by wildfire in 2017. Net merchantable volume of the stand prior to reductions is 120m3/ha, with an average stand height of 22.8m. There is little to no live understory within the block.			
Silviculture Systems SU Comments			SU-1: Clearcut with Reserves; SU is proposed to salvage timber killed in 2017 wildfires.			
Min. Characteristics of Leave Trees (Form, Health, Vigour)			<p>Entire Block:</p> <p>Aspen: 95% retention of live merch (>= 17.5cm DBH); none were counted during the cruise.</p> <p>Douglas-fir: 95% retention of live merch (>= 17.5cm DBH); which equates to approx. 21 sph according to the cruise.</p> <p>Spruce: 95% retention of live merch (>= 17.5cm DBH); none were counted during the cruise.</p> <p>If encountered, retain any live unburned conifer regen, saplings and poles (with green, healthy-looking crowns) where they occur in patches, with the exception of Lodgepole pine stems >50cm in height.</p> <p>The purpose of the prescribed retention is to provide wildlife biodiversity and structural diversity within the stand, as well as aiding in regeneration establishment.</p> <p>STUBBING</p> <p>Retain 3-4 Stub Groups (5 or more stubs per group, 3-5m high) per hectare. These stub groups should be created near and/or connecting riparian areas, green leave trees and/or regen, adjacent green stands/plantations, large CWD logs left after burn, large rocks and/or outcrops, and knolls.</p>			

Additional Comments

Harvesting Constraints	<p>HARVEST INFORMATION</p> <p>This block is appropriate for conventional roadside harvest (i.e. rubber tired skidder, mechanical falling).</p> <p>SAFETY</p> <p>Extensive wildfire disturbance during summer 2017 has created large areas of dead standing timber, which can be overhead hazards (brittle tops, unstable roots).</p> <p>Areas of unstable ground occur where root masses have been burned away below the top soil layer and can pose as tripping, twisting or falling hazards.</p> <p>SOILS</p> <p>Soils may be hydrophobic due to being burned in the 2017 wildfires, and could become greasy and slick during precipitation events. Minimize machine traffic to the extent practicable to reduce further soil damage .</p> <p>SLOPES</p> <p>Slopes average 13% within the block, ranging from 0-35%.</p> <p>ARCHAEOLOGICAL / CULTURAL HERITAGE</p> <p>If a previously unidentified affected Cultural Heritage Resource is encountered during harvesting , road construction or mechanical site preparation, operations must cease to the extent necessary to protect the affected cultural heritage resource until a Cultural Heritage Resource Evaluation can be completed .</p> <p>MIGRATORY BIRDS</p> <p>If a previously unidentified migratory bird nest is encountered during harvesting, road construction, or a silviculture activity associated with this Site Plan, operations are required to cease to the extent necessary to protect the affected migratory bird nest until alternative BMPs can be implemented to minimize or prevent the risk of incidental take.</p> <p>RECREATION</p> <p>The Green Lake and Interlakes Snowmobile Recreation Trails exist within the area , with one running just inside the western block boundary (proposed access road MH R22026.01 overlaps this trail). Notify the local snowmobile clubs if operations occur during winter. MH R22026.01 is proposed for deactivation but is to remain ATV passable for silviculture use. Ensure x-ditches are not too deep that they pose a safety hazard for recreation vehicle users.</p> <p>MINERAL CLAIMS</p> <p>This block is not located within a known Mineral Claim; however, if any identified claim posts, monuments, drill sites and core boxes are encountered, they are to be retained. None of these features were identified during field work.</p>
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SOIL ASSESSMENT											
SU	HAZARD RATINGS			SOIL DISTURBANCE				SOIL CHARACTERISTICS			
	Soil Comp.	Soil Erosion	Soil Disp.	Max Allow Soil Dist %	Max Allow Max Amount TAS may exceed MASD prior	Max Allow Perm Access Structures %	MASD for Roadside work areas %	Depth to Unfavorable Subsoil		Type of Unfavorable Subsoil	Sediment Delivery Risk (Comm. Watershed)
								Min (cm)	Max (cm)		
1	H	M	M	10.0	5.0	3.8	25.0			None Noted	
SU	Critical site conditions that affect the timing of operations and how they affect the timing										
1	The SU has moderately well drained Silty Loam soils. Avoid concentrated forwarding/skidding routes in wet soil conditions. Due to the hydrophobicity of the burned soils, the top layer can become greasy and slick during break-up conditions. Use caution with machinery at this time and while walking through the area. Road surfaces will need to be maintained accordingly to minimize rutting and the potential of becoming stuck.										
SU MANAGEMENT COMMENTS											
SU	SU Description										
1	This SU is comprised of primarily Fdi, with minor components of At, Pli and Sx, all heavily impacted by the Elephant Hill Fire in 2017. Slopes range from 0-35%, averaging 13%. The understory regen layers have been removed from the stand or severely damaged due to wildfire. Windthrow was minimal throughout the SU at the time of layout.										
SOIL MANAGEMENT COMMENTS											
Soil Conservation											
<p>Soils within the block are primarily non-sensitive (SiL); therefore, the maximum soil disturbance limit is set to 10% of the NAR. TAS is currently calculated at 0.7% of the NAR.</p> <p>PAS is calculated at 3.8% of the gross area.</p> <p>Recommend using a random skidding pattern and avoid skidding across depressional areas when wet.</p> <p>This block is consistent with sections 35 and 36 of the FPPR.</p>											
Temporary Access											
<p>All temporary structures must be rehabilitated upon harvest completion, or at least prior to the spring freshet.</p> <p>Rehabilitation will be as follows: decompact soils, and return displaced surface soils, retrievable side-cast and berm material to the extent practicable and necessary to establish and grow trees consistent with the stocking standards.</p> <p>Erosion control measures are required to maintain natural drainage patterns.</p>											
Slope Instability											
<p>No slope instability indicators were noted within or adjacent to the opening.</p> <p>A TSFA is not required.</p>											

RIPARIAN ASSESSMENTS					
Management Strategies					
<p>Maintain natural drainage patterns.</p> <p>MSZ = Machine Sensitive Zone RMZ = Riparian Management Zone</p> <p>See Results and Strategies section - Riparian Management.</p>					
Riparian I.D. and Class	RMA	SU	WIDTH (m)	BA or SPH Retained	Comments (Indicate if in a Community Watershed)
All NCW UC	MSZ	1	5.0		All non-classified wetland and non-classified lake features have been excluded from the harvest area and occur a minimum 5m from the boundary edge. No additional management strategies are required.
RF9G4-1-L 3 L3	RMZ		30.0		The harvest boundary occurs a minimum 50m from the edge of the L3 lake feature, therefore no RMZ overlap occurs. Retain any understory regen and brush to the extent practicable within 100m of the lake edge.

COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION				
<p>The stands in this block have been severely impacted by the 2017 wildfires and there is heavy mortality throughout. Avoid disturbance of pre-existing CWD where practicable. Post-harvest CWD target is 10m3/ha.</p> <p>- Retain a minimum of 4 logs per hectare, each being a minimum of 2m in length and 7.5cm in diameter at one end.</p> <p>- Non-merchantable log and pieces will be left on site as CWD.</p> <p>- Reserved stems will contribute to future CWD. Any reserve trees that blow down will be left as CWD unless they become infested with insects that pose a forest health risk.</p> <p>- All deciduous stems felled for safety, road construction or other operational purposes are to be left on site as CWD.</p> <p>- Efforts will be made to ensure these logs are not broken at time of harvesting . Logs may consist of a variety of species and shall be evenly distributed across the cutblock.</p> <p>- Retain 3 to 4 Stub Groups (5 or more stubs per group, 3-5m high) per hectare. These stub groups should be created near and/or connecting riparian areas, green leave trees and/or regen, adjacent green stands/plantations, large CWD logs left after burn, large rocks and/or outcrops, and knolls.</p> <p>Additional CWD for fisher management has been prescribed as follows: 1 single piece of CWD per hectare, each being >/=35 cm in diameter and >/=7m in length, and elevated 25-50cm above ground; and, 10 debris piles within the block being >/=3m wide by >/=5m long and piled >/=2m high, with >30% of the pieces being >20cm in diameter and >3m long. Debris piles should be a minimum of 20m away from standing timber, and are to be located between WTRAs and the block edge to maintain connectivity between standing timber, WTRAs, and any riparian areas. If encountered, any live, large diameter deciduous are to be retained for potential denning and cavity resting habitat.</p>				
Performance Std. (%) :	100.0	Block Target (%):	100.0	Coarse Woody Debris (m3/ha): 10.0

DEFINITIONS

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2021 11 10	YES

Print off the PAS/TAS table located as an attachment on the Block Details Screen and attach to this prescription.

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
SARAH REMPEL	
DATE SIGNED	
2021/11/10	
I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to standards acceptable of a Registered Professional Forester.	

SILVICULTURE PLAN

ORIGINAL

LICENCE #	CP	BLOCK	UBI	OPENING NUMBER	FDU	LOCATION	LATITUDE / LONGITUDE
TA0058	-	RF9G4	BE9G4	92P.046-507		South Sheridan Lake	51 28 50 / 120 55 54

ECOLOGICAL INFORMATION

SU	Ecology Unit	Area	Zone	Subzone	Variant / Phase	Site Series (series - %)	Elevation Avg (m)	Slope Avg (%)	Aspect	Slope Position	Rooting Depth (cm)	Soil Texture
1	A	44.83	SBS	dw	2	01-100	1,165	13	F	Level	25	SiL

STOCKING REQUIREMENTS				
ASSESSMENT DATES				
Standard Unit		Standards ID	Regen Delay (vrs)	Freegrow Early (vrs)
1		1060550	7	0
				Freegrow Late (vrs)
				20
Min/Max Elevation Regime: 1150 / 1180				

SU : 1											MATURE LAYER										
PREFERRED SPECIES						ACCEPTABLE SPECIES						POST SPACING DENSITY(sph)				MAX CONIFEROUS (sph)					
Species		Min Ht. (m)	Footnotes	Species		Min Ht. (m)	Footnotes	Min		Max											
Fdi	Douglas Fir - Interior							WELL SPACED TREES (sph)													
								Target Pref/Acc		Minimum Pref/Acc		Minimum Pref		Min Horizontal Dist. Pref/Acc (m)							
								600		300		250									
Sx	Hybrid Spruce (SE x SW)																				
Pli	Lodgepole Pine - Interior											Height Relative to Competition (%)									

SU : 1											POLE LAYER										
PREFERRED SPECIES						ACCEPTABLE SPECIES						POST SPACING DENSITY(sph)				MAX CONIFEROUS (sph)					
Species		Min Ht. (m)	Footnotes	Species		Min Ht. (m)	Footnotes	Min		Max											
Fdi	Douglas Fir - Interior						WELL SPACED TREES (sph)														
							Target Pref/Acc		Minimum Pref/Acc		Minimum Pref		Min Horizontal Dist. Pref/Acc (m)								
							800		400		300		2.0								
Sx	Hybrid Spruce (SE x SW)																				
Pli	Lodgepole Pine - Interior											Height Relative to Competition (%)									

SU : 1 SAPLING LAYER															
PREFERRED SPECIES			ACCEPTABLE SPECIES			POST SPACING DENSITY(sph)				MAX CONIFEROUS (sph)					
Species		Min Ht. (m)	Footnotes	Species		Min Ht. (m)	Footnotes	Min		Max					
Fdi	Douglas Fir - Interior							WELL SPACED TREES (sph)							
								Target Pref/Acc		Minimum Pref/Acc		Minimum Pref		Min Horizontal Dist. Pref/Acc (m)	
Sx	Hybrid Spruce (SE x SW)							1000		500		400		2.0	
Pli	Lodgepole Pine - Interior											Height Relative to Competition (%)			

SU : 1REGENERATION LAYER												
PREFERRED SPECIES			ACCEPTABLE SPECIES			POST SPACING DENSITY(sph)				MAX CONIFEROUS (sph)		
Species		Min Ht. (m)	Footnotes	Species	Min Ht. (m)	Footnotes	Min		Max		10000	
Fdi	Douglas Fir - Interior	1.0					WELL SPACED TREES (sph)					
Sx	Hybrid Spruce (SE x SW)	1.0					Target Pref/Acc		Minimum Pref/Acc		Minimum Pref	Min Horizontal Dist. Pref/Acc (m)
Pli	Lodgepole Pine - Interior	2.0					1200		700		600	1.8
										Height Relative to Competition (%)		

OTHER REQUIRED STOCKING INFORMATION
MITD reduced to 1.8m to target micro-site selection as well as obstacles due to high cattle usage in the area.
This block is located within a BEC transition zone between the SBSdw2 and SBPSmk biogeo zones. Field walkthroughs have indicated that the block is most representative of the SBS biogeo zone, and it has therefore been classified entirely as such.
There are no stocking standards listed for SBSdw2 in the applicable FSP; therefore, the stocking standards for SBSdw2 in the new DMH BCTS FSP (#816) have been used.

ACTIVITIES

SILVICULTURE ACTIVITY COMMENTS	
ACTIVITY	COMMENT

MANAGEMENT STRATEGY

COARSE WOODY DEBRIS MANAGEMENT STRATEGY INFORMATION
<p>The stands in this block have been severely impacted by the 2017 wildfires and there is heavy mortality throughout. Avoid disturbance of pre-existing CWD where practicable. Post-harvest CWD target is 10m3/ha.</p> <ul style="list-style-type: none">- Retain a minimum of 4 logs per hectare, each being a minimum of 2m in length and 7.5cm in diameter at one end.- Non-merchantable log and pieces will be left on site as CWD.- Reserved stems will contribute to future CWD. Any reserve trees that blow down will be left as CWD unless they become infested with insects that pose a forest health risk.- All deciduous stems felled for safety, road construction or other operational purposes are to be left on site as CWD.- Efforts will be made to ensure these logs are not broken at time of harvesting . Logs may consist of a variety of species and shall be evenly distributed across the cutblock.- Retain 3 to 4 Stub Groups (5 or more stubs per group, 3-5m high) per hectare. These stub groups should be created near and/or connecting riparian areas, green leave trees and/or regen, adjacent green stands/plantations, large CWD logs left after burn, large rocks and/or outcrops, and knolls. <p>Additional CWD for fisher management has been prescribed as follows:</p> <p>1 single piece of CWD per hectare, each being >/=35 cm in diameter and >/=7m in length, and elevated 25-50cm above ground; and,</p> <p>10 debris piles within the block being >/=3m wide by >/=5m long and piled >/=2m high, with >30% of the pieces being >20cm in diameter and >3m long. Debris piles should be a minimum of 20m away from standing timber, and are to be located between WTRAs and the block edge to maintain connectivity between standing timber, WTRAs, and any riparian areas.</p> <p>If encountered, any live, large diameter deciduous are to be retained for potential denning and cavity resting habitat.</p>
Performance Std. (%): 100.0 Block Target (%): 100.0 Coarse Woody Debris (m3/ha): 10.0

ADMINISTRATION

Amendment number	Date Typed (Yr Mo Dy)	Map Required?
ORIGINAL	2021 11 10	YES

RPF PRINTED NAME	RPF'S SIGNATURE and SEAL
SARAH REMPEL	
DATE SIGNED	
2021/11/10	
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